

Patent Claims

1. Retinal implant having at least one functional unit 4 positioned internally inside an eye and at least one functional unit 2 positioned externally outside the eye, which are connected to one another via a signal path (5, 6, 7, 15, 16, 17; 10, 11, 12, 15, 16, 17) in a manner designed for signal or data transmission, **characterised in that** the transscleral signal-path segment between the functional units (4, 8) can be separated, and in that the signal path between the functional units (2, 4) does not incorporate the anterior eye section, including the cornea and intraocular lens.
2. Implant according to Claim 1, **characterised in that** the signal path comprises a wireless inductive connection (6, 7) which has a respective transmission and reception element inside (6) and outside (7) the eye, which are arranged facing one another, the sclera (9) lying between the transmission and reception elements (6, 7).
3. Implant according to Claim 1, **characterised in that** the signal path comprises a galvanic connection (10, 11, 11') which passes through the sclera.
4. Implant according to Claim 3, **characterised in that** the galvanic connection (10, 11, 11') can be connected after implantation, and preferably disconnected, at mutually complementary contact elements (11, 11').
5. Implant according to one of the preceding claims, **characterised in that** the sclera (9) is penetrated by a cannula (12) which is used for feeding an electrical cable (10) through.
6. Implant according to one of the preceding claims, **characterised in that** a functional unit (8) im-

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planted outside the eye, which is designed to carry out signal processing functions, is provided.

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